## VI. MONITORING AND RESEARCH CONTRACTS

The Department supported a number of monitoring and research-related contracts in 2001/2002 to attain monitoring goals in the SCR. Table 13 lists completed or on-going contracts. Funding for these studies comes through NCCP Local Assistance Grants, federal Section 6 funds, or partnerships with other agencies or organizations. More specific information on contracts is found under earlier discussions on monitored species, research on Department lands, or the NCCP program.

**Table 13.** SCR Monitoring and Research Contracts: Payables & Receivables

Contract Title	Species	Contractee	Status	Amount	Type	Manager
Island Fox Candidate	_	TBA -The	Begin		Receivable -	
Conservation Agreement-		Nature	contract		Section 6	
Santa Cruz Island	Island Fox	Conservancy	in 2003	\$504,000	(special)	Comrack
Island Fox, Island						
Loggerhead Shrike	Island Fox,					
Candidate Conservation	Island	TBA -	Begin		Receivable -	
Agreement -Santa Catalina	Loggerhead	Catalina Island	contract		Section 6	
Island	Shrike	Conservancy	in 2003	\$10,800	(special)	Comrack
		TBA -				
		Zembal,				
		Konecny,	ъ :		D : 11	
1:146 4 161 3	T: 1, C , 1	Hoffmann, Wildlife	Begin contract		Receivable - Section 6	
Light-footed Clapper rail monitoring & protection	Light-footed Clapper Rail	Services	in 2003	\$31,800	(traditional)	Comrack
California Least Tern	Ciapper Kaii	Services	III 2003	\$31,800	Receivable -	Comrack
monitoring & protection		See "Type-			Section 6	
A2530	Least Tern	payables"		\$50,000	(traditional)	Comrack
California Least Tern	Least Telli	payables		\$50,000	Receivable -	Connack
monitoring & protection		See "Type-			Section 6	
A2552	Least Tern	payables"		\$54,945	(traditional)	Comrack
California Least Tern	Least Telli	payables		ψυτ,ντυ	Receivable -	Connack
monitoring & protection					Section 6	
PCA TBA	Least Tern	TBA		\$25,000	(traditional)	Comrack
				1 - 7	Receivable -	
					Partnerships	
Gull-billed Tern food		See "Type-			for Wildlife	
habits	Gull-billed Tern	payables"		\$3,865	(PFWA)	Comrack
Bird Species of Special		See "Type-		-	Receivable –	
Concern - Phase I	Birds	payables"		\$9,000	PFWA	Comrack
Bird Species of Special	Birds	See "Type-		\$6,000	Receivable -	Comrack
Concern - Phase II		payables"			PFWA	
Least Tern Coordination,					Payable -	
2001	Least Tern	Robert Patton	Draft	\$4,999	Section 6	Comrack
Least Tern Coordination					Payable -	
2002	Least Tern	Robert Patton	Draft	\$4,999	Section 6	Comrack
Least Tern Monitoring -					Payable -	
Ormond Beach	Least Tern	Walter Wehtje	Final	\$4,999	Section 6	Comrack
Least Tern Monitoring -	<b>T</b>	77 1 77	F: 1	<b>* * * * * * * * * *</b>	Payable -	
Venice Beach	Least Tern	Kathy Keane	Final	\$4,999	Section 6	Comrack

					Payable –	
Gull-billed Tern food					PFWA/Tax	
habits	Gull-billed Tern	Kathy Molina	Final	\$4,993	Check-off	Comrack
naorts	Belding's	Ratify Monna	Tillai	Ψ <del>1</del> ,223	Payable - Tax	Comrack
Belding's Savannah	Savannah	Richard			Check-off/O	
Sparrow Survey 2001	Sparrow	Zembal	Final	\$3,000	& E	Comrack
Sparrow Survey 2001	Sparrow	Zeilibai	Tillai	ψ3,000	Payable -	Comrack
San Diego Natural History					Local	
Museum Bird Atlas	Birds	SDNHM	Final	\$50,000	Assistance	Comrack
Wuscum Bird Atlas	Ditus	Point Reyes	Tillai	\$50,000	Payable -	Connack
California Bird Species of		Bird			PFWA/Tax	
Special Concern	Birds	Observatory	Final	\$21,693	Check-off	Comrack
Bird Species of Special	Ditus	Obscivatory	Tillai	\$21,093	CHECK-OH	Connack
Concern-range map editing					Payable –	
& species accounts	Birds	John Sterling	Final	\$2,000	O & E	Comrack
& species accounts	Ditus	John Sterning	Tillai	\$2,000	Payable –	Connack
Creasing Assourts DCCC	Dindo	20 comtracts	Ein al	\$0,000	Prayable – PFWA/O& E	Commonle
Species Accounts – BSSC Habitat Surveys and	Birds	20 contracts	Final	\$9,000	II WA/OX E	Comrack
population monitoring of	Amorro toods as 1			1	Doveble	
Arroyo toad and Pacific	Arroyo toads and Pacific pond				Payable- Local	
pond turtles	turtles	USGS		\$183,264	Assistance	Hovey
Demographics and skeletal	turties	0303		\$105,204	Assistance	Hovey
chronology of the arroyo						
toad	Arroyo toad	USGS		\$45,000	Section 6	Hovey
Amphibian and Ant	Alloyo toad	0303		Ψ+3,000	Payable –	Hovey
monitoring in the Nature	Amphibians,				Local	
Reserve of Orange County	Reptiles and Ants	USGS			Assistance	Hovey
Monitoring Herpetofauna	Reptiles and Ants	0303			rissistance	Hovey
and ant diversity of the					Payable –	
MSCP – Carmel Mt. & Del	Herpetofauna				Local	
Mar Mesa	and Ants	USGS		\$28,880	Assistance	Hovey
Ecology and Management		San Diego		+==,===	Tissistance	
of Otay Tarplant	Otay Tarplant	State Univ.	Final	\$41,621	Section 6	Lawhead
er confirme	ouy rurpunt		1 11141	ψ.11,021	Payable -	Bawneaa
CSS Bird Monitoring at		San Diego Co.			Local	
Lakeside Linkage	G001: 1		T. 1			•
	CSS birds	Parks	Final	\$25.537	Assistance	Lawhead
Calif. Gnatcatcher	CSS birds	Parks	Final	\$25,537	Assistance	Lawhead
Calif. Gnatcatcher Dispersal in the Lakeside				\$25,537	Assistance Payable-	Lawhead
Dispersal in the Lakeside	California	San Diego Co.	Final in		Assistance Payable- Local	
				\$25,537 \$69,431	Assistance Payable- Local Assistance	Lawhead  Lawhead
Dispersal in the Lakeside Linkage	California	San Diego Co.	Final in		Assistance Payable- Local	
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor	California	San Diego Co. Parks	Final in		Assistance Payable- Local Assistance Payable –	
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring	California Gnatcatcher	San Diego Co. Parks	Final in 2003	\$69,431	Assistance Payable- Local Assistance Payable – Local Assistance-	Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor	California Gnatcatcher	San Diego Co. Parks  Conservation Biology Inst.	Final in 2003	\$69,431	Assistance Payable- Local Assistance Payable – Local	Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring	California Gnatcatcher Carnivores	San Diego Co. Parks  Conservation Biology Inst.  Conservation	Final in 2003  Final  Final in	\$69,431 \$75,000	Assistance Payable- Local Assistance Payable – Local Assistance- Payable –	Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring  MSCP Corridor Monitoring and	California Gnatcatcher	San Diego Co. Parks  Conservation Biology Inst.	Final in 2003	\$69,431	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local	Lawhead Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment	California Gnatcatcher  Carnivores  Carnivores	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.	Final in 2003  Final  Final in 2003	\$69,431 \$75,000 \$87,595	Assistance Payable- Local Assistance Payable - Local Assistance- Payable - Local Assistance-	Lawhead  Lawhead  Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER	California Gnatcatcher  Carnivores  Carnivores  Wildlife and	San Diego Co. Parks  Conservation Biology Inst.  Conservation	Final in 2003  Final  Final in	\$69,431 \$75,000	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local	Lawhead Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER	California Gnatcatcher  Carnivores  Carnivores  Wildlife and	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.	Final in 2003  Final  Final in 2003	\$69,431 \$75,000 \$87,595	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local Assistance Section 6	Lawhead  Lawhead  Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER Biological Inventory	California Gnatcatcher  Carnivores  Carnivores  Wildlife and	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.  USGS	Final in 2003  Final  Final in 2003  Final	\$69,431 \$75,000 \$87,595	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local Assistance  Section 6  Payable –	Lawhead  Lawhead  Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER Biological Inventory  CSS Index of Biological	California Gnatcatcher  Carnivores  Carnivores  Wildlife and plant species	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.  USGS  San Diego	Final in 2003  Final in 2003  Final in Final in	\$69,431 \$75,000 \$87,595 \$59,991	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local Assistance  Section 6  Payable – Local	Lawhead  Lawhead  Lawhead  Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER Biological Inventory	California Gnatcatcher  Carnivores  Carnivores  Wildlife and	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.  USGS  San Diego State Univ.	Final in 2003  Final  Final in 2003  Final	\$69,431 \$75,000 \$87,595	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local Assistance  Section 6  Payable – Local Assistance	Lawhead  Lawhead  Lawhead
Dispersal in the Lakeside Linkage  MSCP Wildlife Corridor Monitoring MSCP Corridor Monitoring and Assessment Rancho Jamul ER Biological Inventory  CSS Index of Biological	California Gnatcatcher  Carnivores  Carnivores  Wildlife and plant species	San Diego Co. Parks  Conservation Biology Inst.  Conservation Biology Inst.  USGS  San Diego	Final in 2003  Final in 2003  Final in Final in	\$69,431 \$75,000 \$87,595 \$59,991	Assistance Payable- Local Assistance Payable – Local Assistance- Payable – Local Assistance  Section 6  Payable – Local	Lawhead  Lawhead  Lawhead  Lawhead

					Payable –	
		San Diego	Final in		Local	
MSCP Bat Surveys	All Bat Species	Co./USGS	2004	\$103,480	Assistance	Fisher
Pacific Pocket Mouse	Pacific Pocket	San Diego	Final in			
Habitat Soils Analysis	Mouse	State Univ.	2003	\$91,140	Section 6	Lawhead
		Nature				
Orange Co. CA	Calif.	Reserve of			Payable –	
Gnatcatcher & Cactus	Gnatcatcher and	Orange Co.			Local	
Wren Monitoring	Cactus Wren	(NROC)	Final	\$42,360	Assistance	Lawhead
					Payable –	
NROC Vegetation	All Vegetation		In		Local	
Monitoring	Types	NROC	progress	\$45,200	Assistance	Osborne
					Payable –	
Orange Co. Carnivore			In		Local	
Monitoring	Carnivores	NROC	progress	\$32,760	Assistance	Tippets
					Payable –	
Orange Co. Avian					Local	
Productivity and Survival	Birds	NROC	Final	\$31,856	Assistance	Fritz
					Payable –	
Orange Co. Ant			Final in		Local	Tippets
Monitoring	Ants	NROC	2003	\$23,000	Assistance	
					Payable	
Sensitive Plant Inventory –	Sensitive Plant	Co. of San			Local	
MSCP	Species	Diego	Final	\$110,000	Assistance	Osborne
					Payable –	
MHCP Biological	MHCP Covered	Conservation			Local	
Monitoring Plan	Species	Biology Inst.	Final	\$23,232	Assistance	Lawhead
MSCP Monitoring &						
Management Protocol		San Diego			Payable –	
Herpetofauna/Monitoring	MSCP	State	In		Local	Tippets
Database Development	Herpetofauna	Univ./USGS	progress	\$288,659	Assistance	and Miller

## VII. DEPARTMENT RESEARCH AND SPECIAL PROJECTS

## **Current Monitoring Research Projects**

The following section presents current research being conducted by the Monitoring Team and Department biologists, either solely or in conjunction with other agency and/or non-agency personnel. Where applicable, these projects are completed, described in manuscript form and submitted to various peer-review journals for publication.

## RESEARCH: Southern Steelhead Trout Research (submitted for review to California Fish and Game Journal in August of 2002) Biologist: Tim E. Hovey (Department)

During the spring of 1999 a small population of southern steelhead trout was discovered in San Mateo Creek in northern San Diego County. Immediately after the discovery, the California Department of Fish and Game (Department) initiated a program to monitor the status of the southern steelhead trout population of San Mateo Creek. Since that time a total of 40 Department-lead surveys have been conducted on the drainage.